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PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* CHRISTOPHER FARNHAM and DANIEL SCHRAGE

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Appeal 2015-001390  
Application 12/420,950<sup>1</sup>  
Technology Center 3600

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Before HUBERT C. LORIN, NINA L. MEDLOCK, and  
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

SILVERMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1–6, 8, 9, 13–15, 17, and 18. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> The Appellants identify Charles River Analytics, Inc. as the real party in interest. Appeal Br. 1.

### ILLUSTRATIVE CLAIM

1. A system for optimizing the allocation of physically operating resources in a manner that allows each resource to complete a task based on the most efficient allocation:

a communication network;

a plurality of physical resources in communication with said network, said physical resources capable of completing tasks;

a plurality of sensors in communication with said network, said sensors detecting tasks that need to be completed and generating task requests that are transmitted along said communications network;

a computer system in communication with said network, said computer system running an algorithm to detect said plurality of physical resources and said task requests, said computer system matching each one of said resources with one of said task requests based on a priority level assigned to each of said task requests; and

an arbitrage agent operating in said computer system and reviewing all of the transactions between the buyer and seller agents, said arbitrage agent identifying inefficient market transactions, breaking said inefficient transactions and reallocating the buyer and seller agents into a more efficient transaction.

### REJECTIONS

I. Claims 1–6, 8, 9, 13–15, 17, and 18 are rejected under 35 U.S.C. § 101 as constituting ineligible subject matter.<sup>2</sup>

II. Claims 1–6, 8, 9, 13–15, 17, and 18 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement

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<sup>2</sup> The rejection under 35 U.S.C. § 101 was introduced in the Answer as a new ground of rejection. Answer 2.

requirement.<sup>3</sup>

III. Claims 1–6 and 13–15, are rejected under 35 U.S.C. § 102(a) as being anticipated by Avery (US 2007/0174179 A1, pub. July 26, 2007).

IV. Claims 9 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Avery and Mikurack (US 7,130,807 B1, pub. Oct. 31, 2006).

V. Claims 8 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Avery, and Rosenbluth (US 5,134,685, pub. July 28, 1992).

#### FINDINGS OF FACT

The findings of fact relied upon, which are supported by a preponderance of the evidence, appear in the following Analysis.

#### ANALYSIS

##### ***Patent-Eligible Subject Matter***

The claims on appeal stand rejected under 35 U.S.C. § 101 as constituting patent-ineligible subject matter.

According to the Examiner, under the first step of the analytical approach of *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347, 2355 (2014), the claims are directed to “the abstract idea of optimizing the allocation of physically operating resources” and, per the second step of the analysis, the claimed features “amount(s) to no more than mere instructions for implementing the abstract idea on a computer” and, as such, “do not provide meaningful limitation(s) to transform the abstract idea into a

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<sup>3</sup> The Examiner rejects the identified claims under either 35 U.S.C. § 112(a) or 35 U.S.C. § 112 (pre-AIA), first paragraph. Final Action 2. Because the Appellants’ application was filed before September 16, 2012, the pre-AIA version of the statute is applied herein.

patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself.” Answer 2.

The Appellants dispute the characterization of the claimed subject matter as “abstract,” arguing that the claims relate to a “concrete system for optimizing a resource allocation system” and that “[t]here are numerous concrete operational and physical elements listed in the claims.” Reply Br. 2.

Laws of nature, natural phenomena, and abstract ideas are deemed not patentable, because they are regarded as the basic tools of scientific and technological work, such that their inclusion within the domain of patent protection would entail the risk of inhibiting future innovation premised upon them. *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2113 (2013) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293, 1301 (2012)). Yet, the Supreme Court has explained that “we tread carefully in construing this exclusionary principle lest it swallow all of patent law,” because “[a]t some level, ‘all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’” *Alice*, 134 S. Ct. at 2354 (citing *Mayo*, 132 S. Ct. at 1293–94).

In the instant appeal, the Examiner’s characterization of the claimed subject matter as the purported abstract idea of “optimizing the allocation of physically operating resources” (Answer 2) fails to account for the particular details set forth in the claims, including claim 1’s “matching each one of said resources with one of said task requests based on a priority level assigned to each of said task requests” and the use of “an arbitrage agent . . . identifying inefficient market transactions, breaking said

inefficient transactions and reallocating the buyer and seller agents into a more efficient transaction.” Thus, the Examiner’s analysis does not sufficiently establish that the claimed subject matter at issue is directed to an ineligible abstract idea.

Accordingly, the rejection of claims 1–6, 8, 9, 13–15, 17, and 18 under 35 U.S.C. § 101 is not sustained.

### ***Enablement***

According to the Examiner, the claims contain subject matter that is not described in the Specification in a way that enables one skilled in the art to make and/or use the invention, particularly with regard to the operation of an “algorithm” suggested by the claim. Final Action 2.

The Appellants assert that

the present invention is not directed at claiming the various lines of code employed in carrying out the resource allocation and arbitrage of the resources versus the tasks. Instead the present invention is directed at an overarching method of ensuring that resources are allocated based on most urgent needs and in the most efficient process. Countless arrangements of code may be employed by one skilled in the art to produce the result claimed herein once the actual process is disclosed. Applicant was not intent on patenting the specific code limitations embodied in a singular algorithm.

Appeal Br. 8. According to the Appellants,

This concept is well described in the specification. The inclusion of the actual programmatic steps did not seem relevant, because as stated above, the particular program algorithm was not of interest. The present patent is covering the principal [sic] of reallocation using the arbitrage agent.

*Id.*

Yet, the Appellants do not confront, let alone contradict, the Examiner's finding that the Specification does not reveal how to implement the recited "algorithm" — or, as the Appellants concede, the recited "arbitrage agent." *See* Appeal Br. 8. Instead, the Appellants essentially argue that the knowledge of one skilled in the art is sufficient to supply the missing information. On the contrary, "[i]t is the specification, not the knowledge of one skilled in the art, that must supply the novel aspects of an invention in order to constitute adequate enablement." *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1366 (Fed. Cir. 1997).

Accordingly, the rejection of claims 1–6, 8, 9, 13–15, 17, and 18 are rejected under 35 U.S.C. § 112, first paragraph, is sustained.

***Anticipation and Obviousness***

Claims 1 and 14 — the independent claims on appeal — along with dependent claims 2–6, 13, and 15 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Avery. Final Action 3–4. Dependent claims 8, 9, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Avery — as applied to the independent claims — in combination with other references. *Id.* at 4–6.

The Appellants argue that deficiencies of Avery (with respect to the independent claims) preclude the determination that any of the claims should be rejected under either anticipation or obviousness grounds. Appeal Br. 9–17.

Among the reasons proposed for such shortcomings, the Appellants (*id.* at 11–12) dispute the Examiner's finding (Final Action 4 (citing Avery ¶ 30)) that Avery teaches the claimed "arbitrage agent."

The Appellants' argument is persuasive because, despite the appearance of word "arbitrage" therein, the cited portion of Avery (¶ 30) does not disclose the operation of the claimed "arbitrage agent" in reviewing already-established transactions, identifying inefficiencies, breaking such inefficient transactions, and establishing a more efficient transaction.

Accordingly, the rejection of claims 1–6 and 13–15, under 35 U.S.C. § 102(a), and the rejection of claims 8, 9, 17, and 18, under 35 U.S.C. § 103(a), are not sustained.

#### DECISION

We REVERSE the Examiner's decision rejecting claims 1–6, 8, 9, 13–15, 17, and 18 under 35 U.S.C. § 101.

We AFFIRM the Examiner's decision rejecting claims 1–6, 8, 9, 13–15, 17, and 18 under 35 U.S.C. § 112, first paragraph.

We REVERSE the Examiner's decision rejecting claims 1–6 and 13–15 under 35 U.S.C. § 102(a).

We REVERSE the Examiner's decision rejecting claims 8, 9, 17, and 18 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED